

Product datasheet for **SC118613**

p95 NBS1 (NBN) (NM_002485) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	p95 NBS1 (NBN) (NM_002485) Human Untagged Clone
Tag:	Tag Free
Symbol:	p95 NBS1
Synonyms:	AT-V1; AT-V2; ATV; NBS; NBS1; P95
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC118613 sequence for NM_002485 edited (data generated by NextGen Sequencing)

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ATGTGGAAACTGCTGCCCGCCGGGCCCGGCAGGAGGAGAACCATACAGACTTTTGACT
GGCGTTGAGTACGTTGTTGGAAGGAAAACTGTGCCATTCTGATTGAAAATGATCAGTCG
ATCAGCCGAAATCATGCTGTGTTAACTGCTAACTTTTCTGTAACCAACCTGAGTCAAACA
GATGAAATCCCTGTATTGACATTAAGATAATTCTAAGTATGGTACCTTTGTTAATGAG
GAAAAATGCAGAAATGGCTTTTCCGAACTTTGAAGTCGGGGGATGGTATTACTTTTGGG
GTGTTTGGAAAGTAAATTCAGAATAGAGTATGAGCCTTTGGTTGCATGCTCTTCTGTTTA
GATGTCTCTGGGAAAACGCTTTAAATCAAGCTATATTGCAACTTGGAGGATTTACTGTA
AACAAATTGGACAGAAGAATGCACTCACCTTGTCATGGTATCAGTAAAAGTTACCATTAAA
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CTGAAAGCAGTTGAGTCCAAGAAGCAGCCTCCACAAATGAAAAGTTTTTACCCACCTCTT
GATGAACCATCTATTGGAAGTAAAAATGTTGATCTGTCAGGACGGCAGGAAAGAAAAACA
ATCTTCAAAGGAAAACATTTATATTTTTGAATGCCAAACAGCATAAGAAATTGAGTTCC
GCAGTTGCTTTTGGAGGTGGGGAAGCTAGGTTGATAACAGAAGAGAATGAAGAAGACAT
AATTTCTTTTTGGCTCCGGGAACGTGTGTTGTTGATACAGGAATAACAAACTCACAGACC
TTAATTCCTGACTGTGAGAAGAAATGGATTGATCAATAATGGATATGCTCCAAAGGCAA
GGTCTTAGACCTATTCTGAAGCAGAAATGGATTGGCGGTGATTTTCATGACTACAAAG
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GAGTGGCTAAGGCAGGAAATGGAGGTACAAAATCAACATGCAAAAAGAAGAGTCTCTTGCT
GATGATCTTTTATGATACAATCCTTATTTAAAAAGGAGAAGATAA
    
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Clone variation with respect to NM_002485.4
1197 t=>c

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_002485 unedited
 GGGCGGGCCGGNNCGCTTTTTCTCCCCCGGGGTTGAGATTTGTATACAACTTACTATA
 GGCGGGCCGNAATTCGCACGAGGCCGACCGCAGGCGCGGTATCCGCGCTCGTCTAGCAG
 CCCCAGTTACGCGGTTGCACGTCGGCCCCAGCCCTGAGGAGCCGGACCGATGTGAAACT
 GCTGCCCGCCGCGGGCCCGCAGGAGGAGAACCATACAGACTTTTGACTGGCGTTGAGTA
 CGTTGTTGGAAGGAAAACTGTGCCATTCTGATTGAAAATGATCAGTCGATCAGCCGAAA
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 TGTATTGACATTAAGATAAATTCTAAGTATGGTACCTTTGTTAATGAGGAAAAAATGCA
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 ACTCATTTGTGGACGTCCAATTGTAAGCCAGAATATTTACTGAATTCCTGAAAGCAGT
 TGAGTCCAAGAAGCAGCCTCCACAAATTGAAAGTTTTACCCACCTCTTGATGAACCATCT
 ATTGAAAAGTAAATGTTGATCTGTCAGGACGGCAGGAAAGACAACAAATCTTCAAAGG
 AAAACATTTTATTTTTGGATGCAAACAGCATAAAGAAATGGGTCCGCCATTGTTTTT
 TGAAGTGGGGAACCTTGGTTGTTACTCAAGGAGATGAAGAAAAACCTAATTTCTTTTTG
 GCTCCCGAACCTGTGTTGTTGAACC

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_002485 unedited
 CCGCGGTCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT
 TTTTTTTTTTTAGGGGAAAAGGATTTTTTACTAATTGGCAAGGAATTTAATGAGGAAA
 GGATAATTTTTCAATAAACAGGTTACAATGACTGGATACTTGTGGGGGAAAAAAA
 AACCTGATCCATAATTCACAACATACATTTCAATTCAGGGGGGATCACAAATTA
 TTTAAAGTTTTTAAATAGAGCAAAATTTTGAATTTTGGGGTAAATGGAGAGAAAA
 AATTTCAAACCAAGAAAAAATAAATTTGACCTTGCAAAATTTAAACTTTTTTTCTT
 CAAAAACATAAAAAAAGCAGTCAAGCCACAACTAGGGGTAATATCTCAATACCTATAT
 CCGACAAAAAAGTGCATTTAAATGTAAAAAATTTCTATGACCCAATTATTGCTTTC
 AGGGATTTACAAATTAACCAAAATGAAACATCCCTACCCACCGATTGGAATGGTTAA
 AAGGAAAAAATACTGACAACACCAATATTTGTAAGACAGGAGGTCCCAAACTCTCATT
 ATTATATTCATAAATTGACAAATATAAAAACTGCTATAGTAGGGCAGTCTTCCTTATAAG
 GGATTGTGGGCATTACANAAAAAATAATTAATCTGGGCATTATATTCCTTAACTGAAAA
 TGGAGACCATATGTTCCACCAGCTTCACTTTGGAATTTATGAACCTGGCCTTTTAAAGAA
 CTCAAAGACTCCCTTTTATCCACCTAATATGCCCTGGAATTTCTACCTTAAAGTTTCC
 CTGTTCTTTTCCATGCTCTACCACTATTATTTAAGGGTCTAACCTTTTATATTAT
 TTCAATAATTCACCTGGGCCAATGCGCTGTGANAAAAAATTGCAGAATGGCTCCCCC
 ATGG

Restriction Sites:

NotI-NotI

ACCN:

NM_002485

Insert Size:

4420 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_002485.4](#), [NP_002476.2](#)

RefSeq Size: 4639 bp

RefSeq ORF: 2265 bp

Locus ID: 4683

UniProt ID: [O60934](#)

Cytogenetics: 8q21.3

Domains: FHA

Protein Families: Druggable Genome

Protein Pathways: Homologous recombination

Gene Summary: Mutations in this gene are associated with Nijmegen breakage syndrome, an autosomal recessive chromosomal instability syndrome characterized by microcephaly, growth retardation, immunodeficiency, and cancer predisposition. The encoded protein is a member of the MRE11/RAD50 double-strand break repair complex which consists of 5 proteins. This gene product is thought to be involved in DNA double-strand break repair and DNA damage-induced checkpoint activation. [provided by RefSeq, Jul 2008]

Transcript Variant: This variant (1) encodes the longer isoform (1).